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MICROWAVE OVEN

INSTALLATION INSTRUCTIONS

PLEASE READ AND SAVE THESE INSTALLATION INSTRUCTIONS.

LMV1314W

LMV1314B

LMV1314SV

P/NO.: 3828W5U0516

YOUR SAFETY FIRST

Read this entire manual before you begin.

BEFORE YOU START

- **Proper installation is the installer's responsibility!**

- Write the model & serial numbers on the owner's manual. The model number label is located on the oven front. See Figure 1. The mounting plate is located on the back side of the microwave oven. See Figure 2.

BE SURE TO READ THE FOLLOWING SAFETY INSTRUCTIONS:

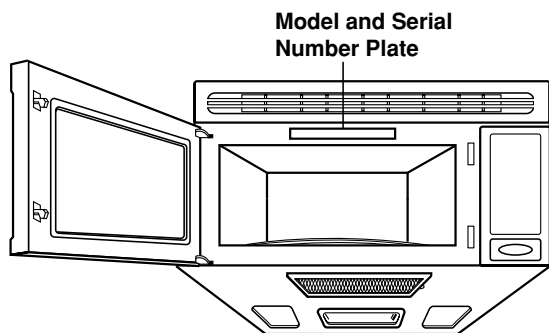
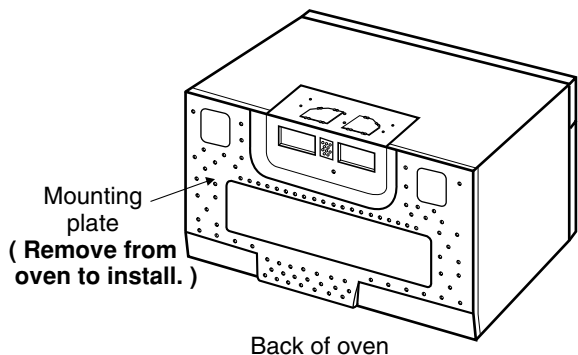


Figure 1



Back of oven

Figure 2



FOR YOUR SAFETY:

- You will need TWO people to install this oven. It is heavy and could cause personal injury if not handled properly. The dimensions of the oven are as follows:

Height: 16 1/8 inches

Width: 22 inches

Depth: 16 5/8 inches

Weight: 48 pounds

- **Avoid Electrical Shock!**

- Before you drill into the wall, note where electrical outlets are and where electrical wires might be concealed behind the wall. **YOU COULD GET AN ELECTRIC SHOCK** if you contact electrical wires with your drill bit.
- Locate and disconnect the power to any electrical circuits that could be affected by installing this oven. **IF YOU DO NOT DISCONNECT THE POWER, YOU COULD GET AN ELECTRIC SHOCK.**

- **ELECTRICAL RATING OF THIS OVEN: 120V AC 60Hz.**

12.5 A / 1350 W (Microwave oven + Cooktop Lamps + Ventilation Fan)

Ventilation Capacity 130 CFM

- You need a DEDICATED 120V, 60Hz, AC only, 15 or 20A, fused electrical supply (located in the cabinet above the microwave as close as possible to the microwave) serving only the microwave.

YOUR SAFETY FIRST

- **THIS APPLIANCE MUST BE GROUNDED!**

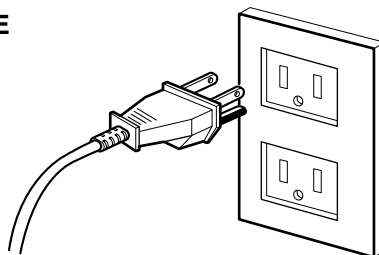
– If there is an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug.

- Place the plug into a properly installed and grounded outlet. See Figure 3.
- Do not use an extension cord.
- Keep the power cord dry and do not pinch or crush it.

- **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG!**

This appliance **MUST** be grounded!

PROPERLY POLARIZED AND GROUNDED OUTLET



Three-Pronged (Grounding) Plug
Figure 3

! WARNING !

If you use the grounding plug improperly, you risk electric shock!

– Check with a qualified electrician if you are not sure whether the oven is properly grounded or if you do not completely understand the grounding instructions.

DO NOT USE A FUSE IN THE NEUTRAL OR GROUNDING CIRCUIT.

! WARNING !

Improper grounding could result in electric shock or other personal injury.

SAVE THESE INSTRUCTIONS FOR THE LOCAL ELECTRICAL INSPECTOR'S USE.

- **DO NOT EXPOSE YOURSELF TO EXCESSIVE MICROWAVE ENERGY!**

- DO NOT try to operate the microwave oven with the door open.
- DO NOT tamper with or defeat the safety interlocks.
- DO NOT place objects between the microwave oven front face and the door.
- DO NOT allow soil or cleaner residue to build up on the flat surfaces around the microwave oven door.
- DO NOT operate the microwave oven if it is damaged.
- The microwave oven door must close properly to operate safely.
- DO NOT USE THE MICROWAVE OVEN:

- If the door is bent.
- If the hinges or latches are broken or loose.
- If the door seals, sealing surfaces or glass is broken.

– DO NOT ATTEMPT TO ADJUST OR REPAIR THE OVEN YOURSELF!

It should be adjusted and repaired by a qualified technician who can check for microwave leakage after repairing the oven.

! WARNING !

If you do not use the microwave oven as instructed, you could be exposed to excessive microwave energy.

MOUNTING SPACE

• MAKE SURE YOU HAVE ENOUGH SPACE AND SUPPORT.

- Mount the oven against a flat, vertical wall, so it is supported by the wall. The wall should be constructed to support 150 lbs.
- ATTACH AT LEAST ONE of the two lag screws supporting the oven to a vertical, frame member.
- DO NOT mount the microwave oven to an island or peninsula cabinet.
- BE SURE the rear wall structures are able to support 150 lbs., plus the weight of any items you place inside the oven or upper cabinet.
- Locate the oven away from strong draft areas, such as windows, doors, and strong heating vents.
- BE SURE you have enough space. See Figure 4 below for minimum vertical and horizontal clearance.



WARNING



If you do not mount the oven as instructed,
you risk personal injury and/or property damage.

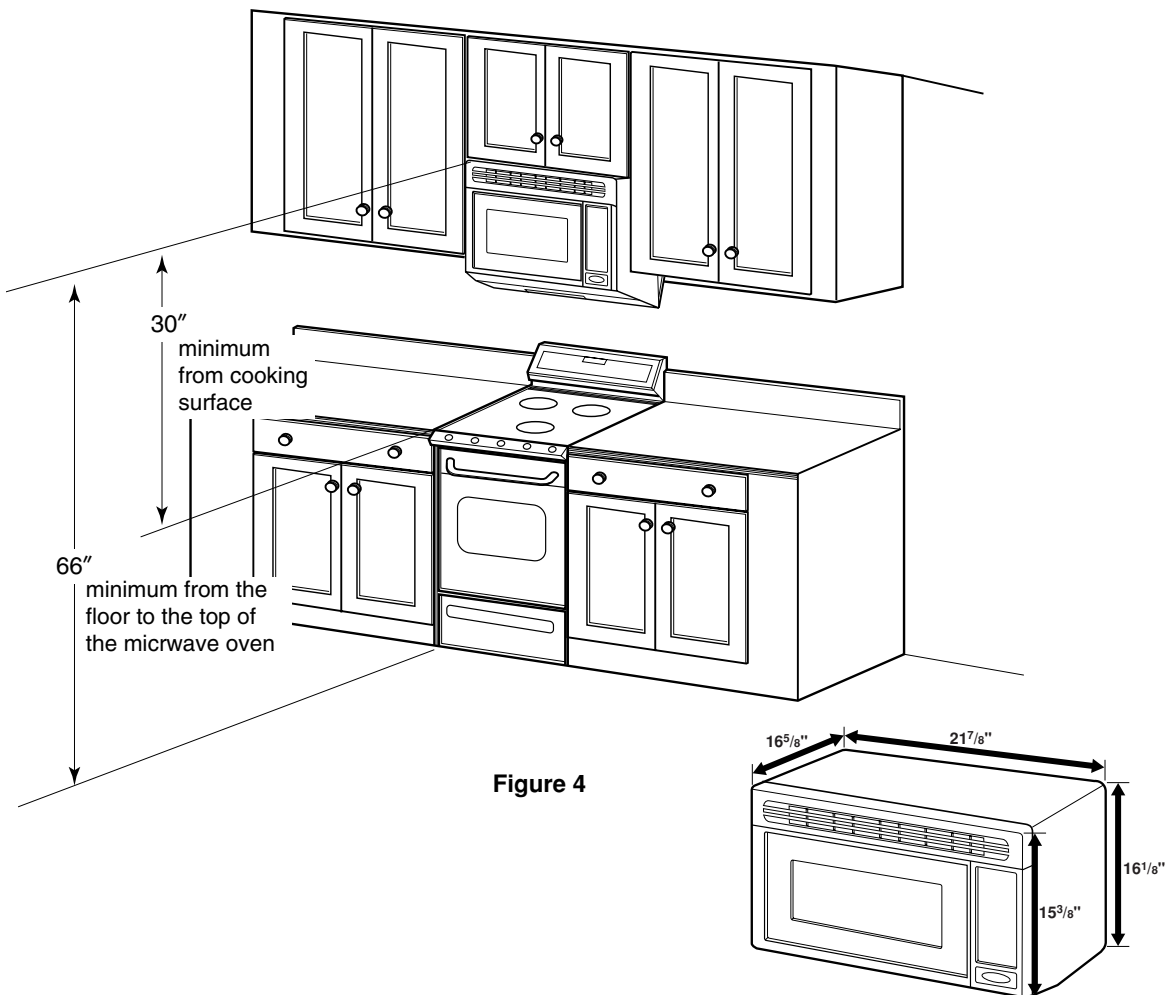


Figure 4

CAUTION

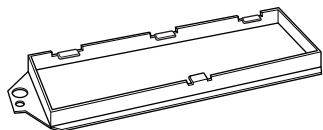
- Before you begin installing the oven, PLACE A PIECE OF THE CARTON OR OTHER HEAVY MATERIAL (a blanket) over the countertop or cooktop to protect it. **Do not use a plastic cover.** Failure to protect these surfaces could result in property damage.

INSTALLATION HARDWARE

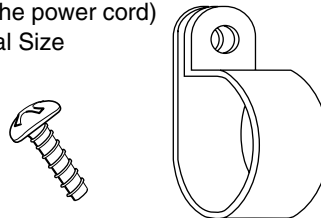
THE FOLLOWING PARTS ARE NOT SUPPLIED WITH THE OVEN EXCEPT DUCT CONNECTOR.

NOTE: Depending on your ventilation requirements, you may not use all of these parts.

Duct connector
(for roof-venting or wall-venting installation)
Not Actual Size



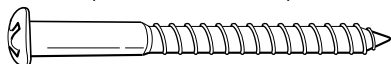
**One power cord clamp and
One dark-colored mounting screw**
(to hold the power cord)
Actual Size



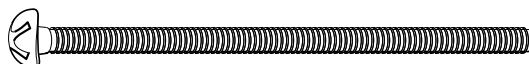
One power cord clamp bushing - Actual Size
(for the cord hole in a metal upper cabinet)



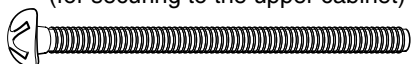
Four 1/4" x 2" lag screws - Actual Size
(for wall stud holes)



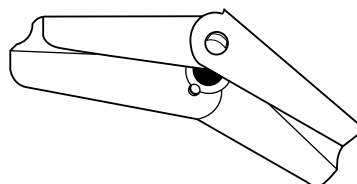
Four 1/4" x 3" toggle bolts - Actual Size
(for drywall holes)



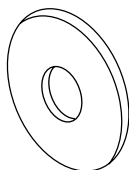
Two 1/4" x 2" bolts - Actual Size
(for securing to the upper cabinet)



Four spring toggle heads - Actual Size
(for the toggle bolts)



Two washers - Actual Size
(for the two upper cabinet bolts)



Two self-tapping screws - Actual Size
(for attaching the damper duct connector)



NOTE: You need to install at least one lag screw into a 2" x 4" stud and four anchor bolts into the wall. The mounting area must meet the 150 lbs. weight requirement.

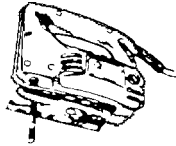
YOU WILL NEED THE FOLLOWING TOOLS AND MATERIALS FOR THE INSTALLATION:

Carton or other heavy material for covering the counter top.

Clear tape
(for taping the templates to the wall)

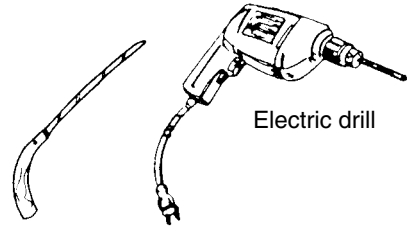


Stud finder or thin nail.



Saber saw (for cutting vent holes for roof or wall venting)

Keyhole saw (for the power cord hole)

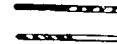


Electric drill

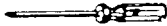
3/8" and 3/4" wood drill bits



1/2" and 3/16"
drill bits



Phillips screwdriver (for the screws)



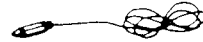
Pencil



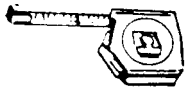
Flat blade screwdriver (for the mounting rod)



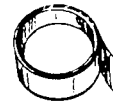
Plumb line



Measuring tape (metal preferred)



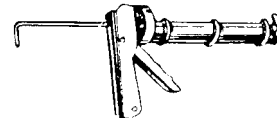
Duct Tape



Small side cutters or tin snips



Caulking gun



Gloves



- If you have brick or masonry walls, you will need special hardware and tools.
- The ductwork you need for the installation is not included. All wall and roof caps must have a back-draft damper. (Shown on page 5.)

STEP 1: PREPARE THE ELECTRICAL CONNECTIONS



AVOID ELECTRICAL SHOCK! THIS APPLIANCE MUST BE GROUNDED!

1. Locate the grounded electric outlet for this oven in the cabinet above the oven, as shown in Figure 5.

NOTE: The outlet should be on a circuit dedicated to the microwave oven (120V, 60Hz., AC only) with a 15 or 20A fused electrical supply.

IMPORTANT: If you do not have the proper wall outlet, you **MUST** have one installed by a qualified electrician.

2. Attach the upper cabinet template to the upper cabinet wall with clear type and cut the power-supply-cord hole (shown in Figure 5) later when you prepare the wall and upper cabinet in Step 4.

NOTE: Do not use an extension cord.

Keep the power cord dry and do not pinch or crush it.

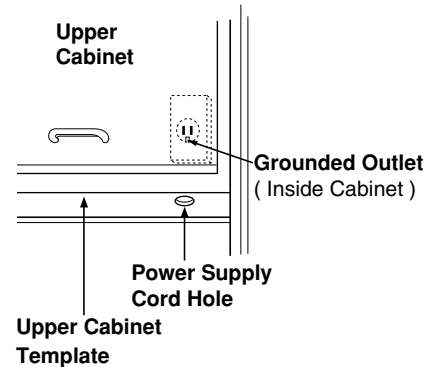


Figure 5



Improper grounding could result in electric shock or other personal injury.

- **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG!**
This appliance **MUST** be grounded!

STEP 2: PREPARE THE VENTING SYSTEM

NOTE: The ductwork you need for outside ventilation is not included with your oven. The standard ductwork fittings and length are shown in Figure 10, page 9.



WARNING - FIRE HAZARD



THIS OVEN MUST BE PROPERLY VENTED!

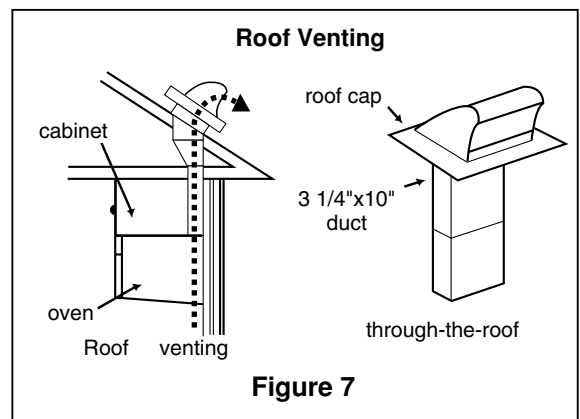
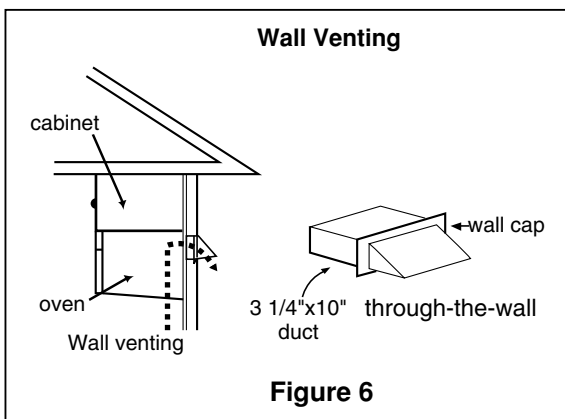
You may vent your oven in one of three ways. However, do NOT vent into a wall cavity, an attic, or an unused area.

Roof-venting If your oven is located on an outside wall near the roof, as in Figures 7 (3 1/4" x 10" duct) and 9 (6" round duct.)

Wall-venting If your oven is located on an outside wall of your house, as in Figure 6 (3 1/4" x 10" duct) and Figure 9 (6" round duct.)

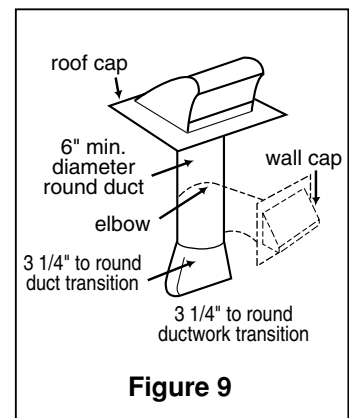
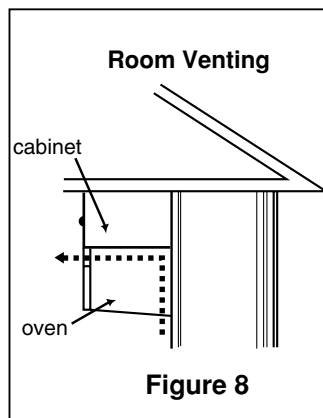
Room-venting If your oven is located on an inside wall of your house, as in Figure 8.

NOTE: If you choose the rear exhaust method (roof-or wall-venting), be sure there is enough clearance within the wall for the exhaust duct.



REMEMBER AS YOU INSTALL THE VENTING:

- Keep the length of the ductwork and the number of elbows to a minimum to ventilate your oven efficiently. See examples on page 9.
- Keep the size of the ductwork the same.
- Do not install two elbows together.
- Use duct tape to seal all joints in the duct system.
- Use caulking to seal the exterior wall or roof opening around the cap.



STEP 2: PREPARE THE VENTING SYSTEM

STANDARD FITTINGS

NOTE: If the existing duct is round, you must use a rectangular-to-round adapter, with a rectangular 3" extension duct installed between the damper assembly and the adapter to prevent the exhaust damper's sticking.

DUCT LENGTH

The total length of the duct system, including straight duct, elbows, transitions, and wall or roof caps **must not exceed the equivalent of 140 feet.**

For best performance, do not use more than three 90 degree elbows.

Below are the standard fittings and their equivalent length in feet.





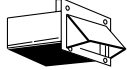

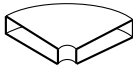
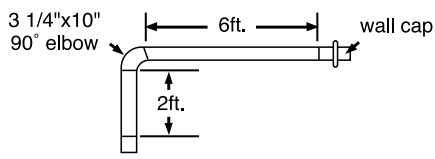
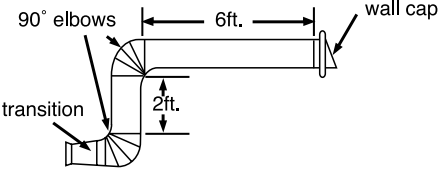
| | | | |
|--|--|---|--|
| 1  3 1/4"x10" to 6"=5ft. | 2  3 1/4"x10" roof cap=24ft. | 3  3 1/4"x10" 90° elbow=25ft. | |
| 4  90° elbow =10ft. | 5  3 1/4"x10" wall cap =40ft. | 6  45° elbow =5ft. | 7  3 1/4"x10" flat elbow =10ft. |

Figure 10

To calculate the equivalent length of each duct piece used, see the examples below.

| Examples | |
|---|--|
| <p>For 3 1/4"x10" SYSTEMS</p>  | <p>For 6" ROUND SYSTEMS</p>  |
| <p>1-3 1/4" x 10" 90° elbow = 25 ft.</p> <p>1-Wall Cap = 40 ft.</p> <p>8 feet straight duct = 8 ft.</p> <p>TOTAL LENGTH = 73 ft.</p> | <p>1-transition = 5 ft.</p> <p>2-90° elbows = 20 ft.</p> <p>1-Wall Cap = 40 ft.</p> <p>8 feet straight = 8 ft.</p> <p>TOTAL LENGTH = 73 ft.</p> |

STEP 3: PREPARE THE VENT MOTOR

Your microwave oven is shipped with the vent motor assembled for room venting. If you want wall-venting or roof-vented installation, you must change the fan, as detailed below.

⚠ WARNING ⚠ ELECTRICAL SHOCK HAZARD! UNPLUG UNIT BEFORE WORKING ON IT.

- DO NOT PULL OR STRETCH THE BLOWER WIRING! Pulling and stretching the blower wiring could result in electrical shock.

REMOVE THE MOUNING PLATE

1. Remove any shipping materials and parts from inside the microwave oven.
2. Cover the counter top or cooktop with a thick, protective covering to protect it from damage and dirt. See Figure 11.

NOTE: If you have a free-standing range, disconnect it, move it onto a piece of cardboard or hardboard and pull it away from the wall, so that you can get closer to the upper cabinet and back wall for easier measuring and drilling. Be careful not to pinch or damage the cord when you push the range back.

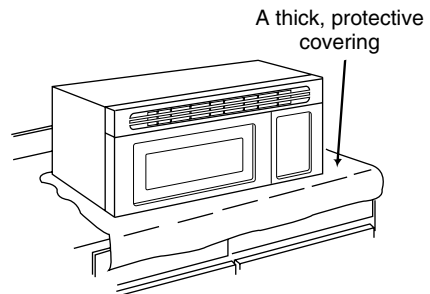


Figure 11

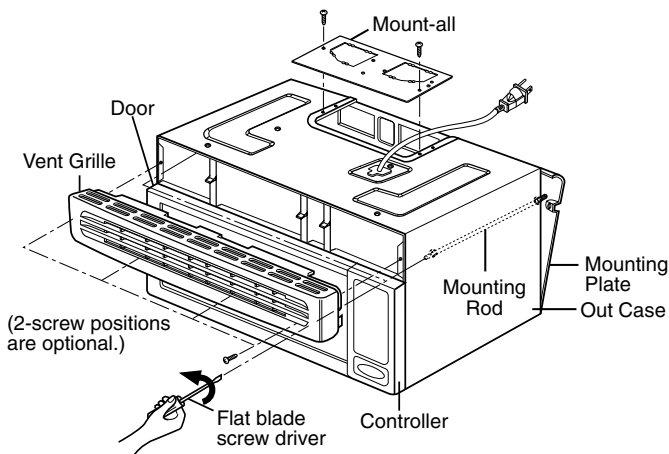
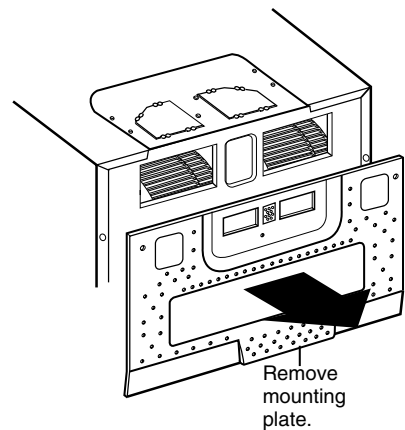


Figure 12



3. Remove vent grille by removing two screws on the vent grille.
4. Turn two mounting rods counter clockwise with a flat blade screwdriver and remove the mounting plate from the unit. See figure 12.
5. Locate exhaust adaptor, grease filter and hardware packet.
6. At this point, remove any adhesive tape (if these is any), on the exhaust adaptor, the grease filters and the power supply cord.

ROOM-VENTED INSTALLATION:

Go to “STEP 4: PREPARE THE WALL AND UPPER CABINET FOR INSTALLATION” located on page 12.

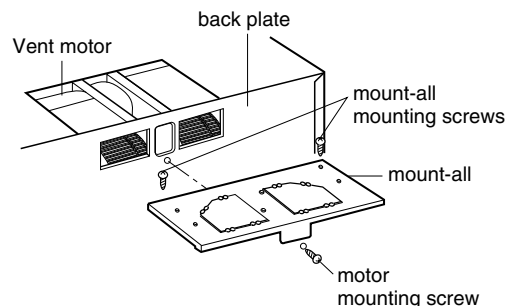


Figure 13

ROOF-VENTED INSTALLATION:

1. Remove vent grille by removing two screws on the vent grille.
2. Turn two mounting rods counter clockwise with flat blade screwdriver and remove the mounting plate from the unit. See figure 12.
3. Remove the mount-all from the back plate by removing two mount-all mounting screws and one motor mounting screw. See figure 13.
4. Leaving the motor wire connected, lift up, rotate and reattach the motor so that the exhaust ports face the top of the cabinet. See figure 14.
5. Use side cutters or tin snips to cut and remove knockouts from the mount-all. Be careful not to distort the plate. See figure 15.
6. Reattach the mount-all on the cabinet with three screws.

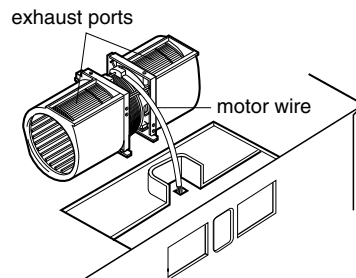


Figure 14

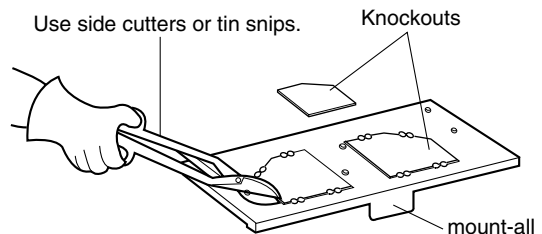


Figure 15

WALL-VENTED INSTALLATION:

1. Remove one motor mounting screw and two mount-all mounting screws. Remove the mount-all from the oven. See Figure 16.
2. Carefully lift the vent motor out of the microwave oven.
3. Rotate the vent motor 180° so the exhaust ports face the back of the cabinet. See Figure 17.
4. Place the motor back into microwave oven.
5. Reattach the mount-all. Attach the motor mounting screw and then two mount-all mount screws. See Figure 16.

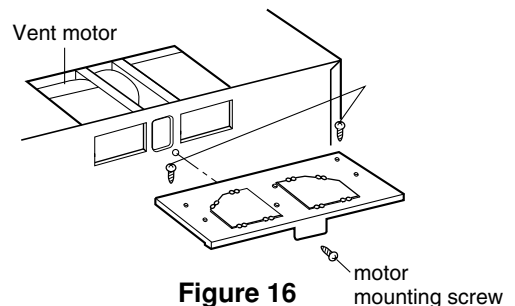


Figure 16

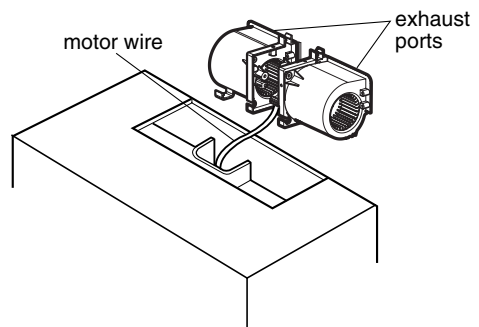


Figure 17

STEP 4: PREPARE THE WALL AND UPPER CABINET FOR INSTALLATION

MEASURE AND TACK / TAPE UP THE TEMPLATES

1. Using a plumb line and (metal) measuring tape, find and mark the vertical center line on the back wall, as in Figure 18.
2. Find and mark one or two points where the studs are on the wall. (Studs are normally 16 inches apart) Then measure and mark the stud locations within the mounting plate area on the wall.
If you cannot find a wall stud, consult a local building contractor.

CAUTION

DO NOT ATTEMPT TO INSTALL THE MICROWAVE OVEN IF YOU CANNOT FIND A WALL STUD.

NOTE: Be sure the minimum width is 22 inches and the distance from the top of the microwave oven to the cooking surface is at least 30 inches. See Figure 4 on page 4.

3. Securely tape or tack the upper cabinet template to the upper cabinet. See Figure 22.
NOTE: If the cabinets are not plumb, adjust the mounting plate position to the cabinets. Remember, the oven must hang level. If the front edge of the cabinet is lower than the back edge, adjust the mounting plate position to be level with the cabinet front.
4. Using the mounting plate, mark the position for attaching it on the wall with a pencil. If you want a wall vented installation, mark the position for the ventilation hole ($10\frac{3}{4}$ " \times "4") on the wall too. See Figure 19.
5. Measure the bottom of the upper cabinet frame. Trim the template so that the template will fit on the bottom of the upper cabinet. If the upper cabinet has a recessed area, trim the template so it fits inside the recessed area. Align the centerline of the upper cabinet template with the centerline of the wall template, then securely tape or tack the upper cabinet template in place. See Figure 19.

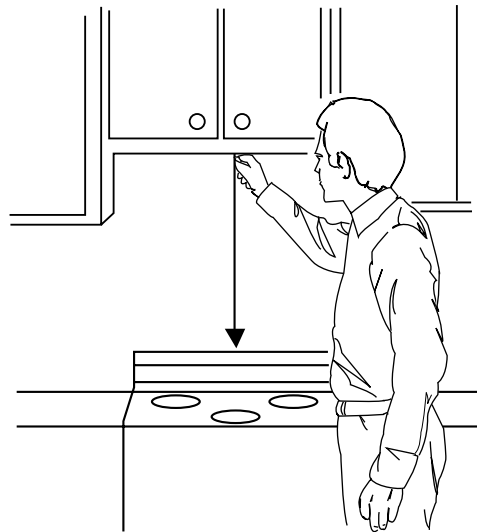


Figure 18

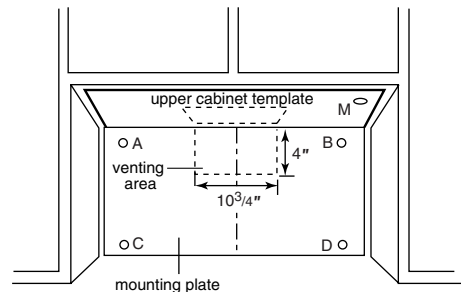


Figure 19

STEP 4: PREPARE THE WALL AND UPPER CABINET FOR INSTALLATION

DRILL THE HOLES IN THE WALL AND UPPER CABINET.



BE VERY CAREFUL WHEN DRILLING HOLES INTO THE WALL.

Electrical wires could be concealed behind the wall covering and if the drill hits them you could get an electric shock.

1. Find the points on the mounting plate labeled A, B, C and D. Drill a 3/16" diameter hole at any points that are over a wall stud. Drill a 3/4" diameter hole at any points over drywall.
2. Locate the wall stud closest to the center of hole on the mounting plate. Drill 3/16" holes into the wall stud in each of the areas. If a wall stud is not located within these areas, drill 3/4" diameter holes nearest to the center of the areas as possible.
If there is not a wall stud within the holed areas or behind points marked A, B, C, and D, DO NOT install microwave oven. (Consult building inspector.) There must be at least one stud in those areas.
3. Cut or drill a 2" diameter hole at the marked area, power supply cord hole (**M**) on the upper cabinet template. If the upper cabinet is metal, you will need to cover the edge of the hole with the power supply cord bushing (not included) to prevent damage to the cord from the rough metal edge.

YOU MUST COVER THE EDGE OF THE POWER SUPPLY CORD HOLE IN A METAL CABINET WITH THE POWER SUPPLY CORD BUSHING. FAILURE TO DO SO COULD RESULT IN DAMAGE TO THE CORD AND ELECTRIC SHOCK.



4. Cut out the venting areas (with the saber saw):
 - **ROOF-VENTED:** cut out the shaded area marked E on the upper cabinet template.
 - **WALL-VENTED:** cut out the marked area on the wall. See Figure 19.
 - **ROOM-VENTED:** Need not make any rectangular hole (for ventilation) on the upper cabinet and wall.
5. Complete whichever venting system you have chosen. Use caulking compound to seal the exterior wall or roof opening around the wall cap or roof cap.

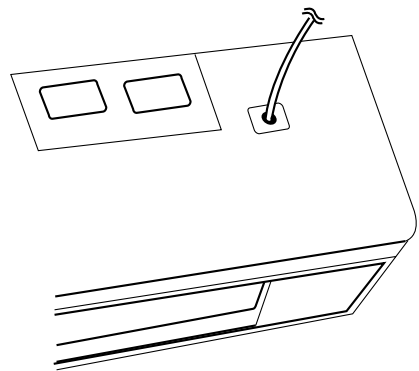


Figure 20

STEP 5: INSTALL THE MOUNTING PLATE

1. Remove the template from upper cabinet.

NOTE: If you are venting the oven through the wall, be sure you align the duct connector (included) on the rear of the mounting plate with the 3¹/₄"x10" duct. See Figure 21, 22.

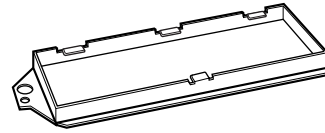


Figure 21

2. If you have drywall, Prepare the toggle bolts (not included) by putting the bolts through the corner holes and attaching a spring toggle head to the end of each toggle bolt as shown in Figure 23.

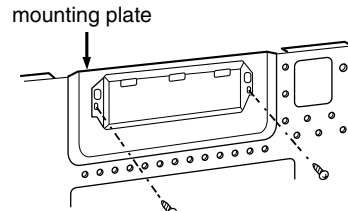


Figure 22

3. Place the mounting plate against the wall and match the screw holes. See Figure 23.

NOTE: Be sure to leave at least one wall-thickness of space between the head of the toggle bolt and the spring toggle head so that the spring toggle can open on the inside of the wall, as shown in Figure 25. You may have to pull out slightly on the bracket to put tension on the toggles.

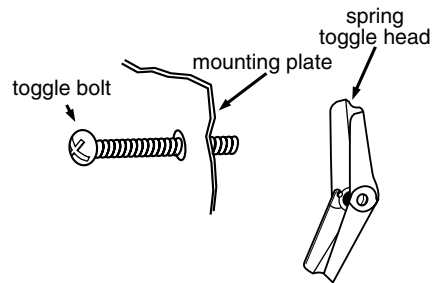


Figure 23

4. Locate the stud holes (3/16") and insert the lag screws through the mounting plate and into the holes. See Figure 26.

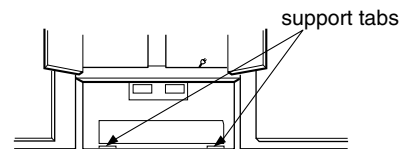


Figure 24

5. Insert the toggle bolts through the drywall holes (3/4"). Tighten the toggle bolts.

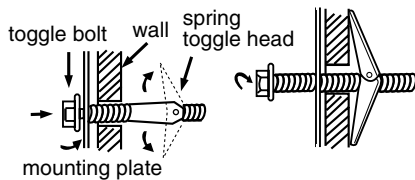


Figure 25

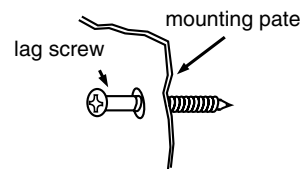


Figure 26

STEP 6: ATTACH THE OVEN TO THE WALL



You will need two people to lift this microwave. Failure to use more than one person could result in personal injury.

1. Carefully lift microwave oven and hang it on support tabs (See Figure 24, page 14) at the bottom of the mounting plate. Reaching through upper cabinet, thread power supply cord through the power supply cord hole in the bottom of the upper cabinet. See Figure 27.
2. Rotate the microwave upward so the top of the oven is against the bottom of the upper cabinet or cabinet frame.
3. **ROOF-VENTED INSTALLATION:** Align the duct connector with the vent on top of the microwave oven. Damper should be on top of tab. Use two tapping screws (bright-colored) to attach duct connector to the microwave oven. See Figure 28, 29.

NOTE: Duct connector must be attached to microwave oven **after** microwave oven is installed.

4. **ROOF VENTED INSTALLATION:** Install ductwork through the vent opening in the upper cabinet. Complete the venting system through the roof according to the method needed. See Figure 30. See **PREPARE THE VENTING SYSTEM, STEP 2** on page 8. Use caulking to seal the exterior roof opening around the exhaust cap. See Figure 6 on page 8.
5. Use the power supply cord clamp to bundle the power supply cord. Install the power supply cord clamp, using a screw as shown in Figure 30, to the inside of the cabinet.
6. Slide the grease filter into the side slot, then push up and toward oven center to lock. See Figure 31.
7. Plug in the power supply cord.
8. Read your Owner's Manual, then check the operation of your microwave oven.

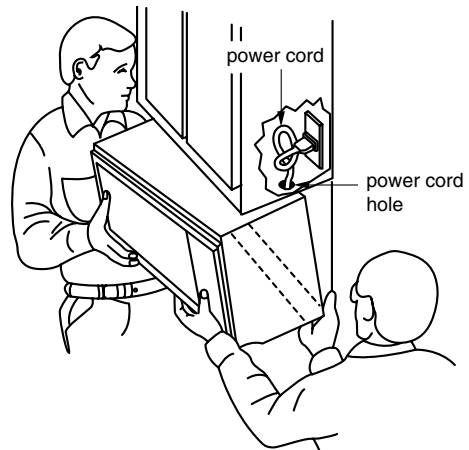


Figure 27

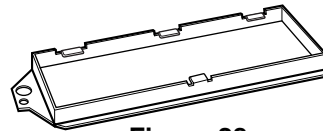


Figure 28

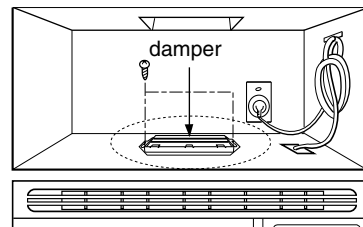


Figure 29

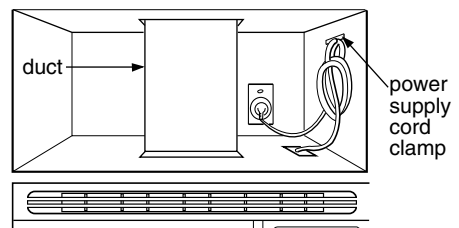


Figure 30

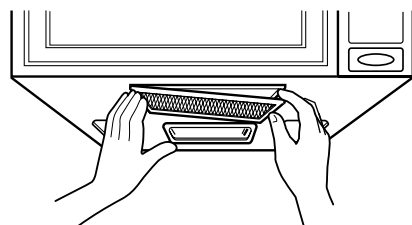


Figure 31



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